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EXAMINER

LAO, LUN S

ART UNIT PAPER NUMBER

2615

DATE MAILED: 06/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/492,913	EATON ET AL.	
	Examiner	Art Unit	
	Lun-See Lao	2615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 March 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5, 15-72 and 93-95 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 15-72 and 93-95 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>3/3/06</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Introduction

1. This action is in response to the amended filed on 03-03-2006. Claims 6-14 and 73-92 have been withdrawn. Claims 1-5, 15-72 and claims 93-95 are pending.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-5, 66 and 68-69 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hagen et al. (US PAT 6,424,722) in view of Knappe (US PAT 6,061,431).

Consider claim 1, Hagen teaches a method comprising communicating (fig.9) between a mobile device (portable multiprogram unit PMU 320, col. 12, line 66 – col. 13, line 9) and programming fitting server (host computer 236, to perform programming function, col. 10, lines 11-22); and programming software (store program in memory 374) in a hearing aid (344) using (download and control) the programming fitting device (236) and the mobile device (320). See col. 14, line 1 - col. 15, line 37.

Art Unit: 2615

Hagen does not teach that the communication between the mobile device and the programming fitting server uses a mobile wireless communication protocol.

Knappe teaches programming (adjusting hearing compensation) hearing devices, wherein communication between a mobile device (cellular telephone, col. 5, lines 6-17) and a programming fitting server (server hosting database 24, col. 2 line 60 – col. 3, line 20) uses a mobile wireless communication protocol (the compensated audio signal is forwarded to a cellular telephone by a mobile wireless communication protocol). Knappe further teaches the programming/compensation services works for wired/land_lined as well as wireless devices (col. 5, lines 6-17).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Knappe into Hagen to include wireless communications, implemented on a mobile wireless communication protocol, between the mobile device and the programming fitting server, in addition to the wired communications. In so doing, programming would have been enhanced by customization based on attributes stored in an attribute database (col. 1, lines 37-67).

Consider claims 2-3, Hagen teaches a programming software in a hearing aid includes upgrading software in the hearing aid (see figs. 9-10 and col. 14 line 1-col. 15 line 37); and the programming software in a hearing aid includes sending a distributed application from the server (see fig.9, (236 such as center computer and see col.2, line 22-42)) to the mobile device (320), the distributed application being adapted to interact with the hearing aid (see col. 14 line 1-col. 15 line 37).

Art Unit: 2615

Consider claim 4, Hagen as modified by Knappe teaches programming (program) a hearing aid system (344, 348) through a mobile device (portable multiprogram unit PMU 320, col. 12, line 66 – col. 13, line 9) using at least one mobile wireless communication protocol (note discussion of claim 1, with respect to mobile wireless communication protocol), wherein programming the hearing aid system includes (see figs 9-10 and col. 14 line 1 –col. 15 line 15):

receiving (download, col. 13, lines 4-11; col. 14, lines 16-18) a distributed application (hearing aid programming software) in the mobile device (PMU, 320) from a programming fitting server (host computer 236, col. 10, lines 11-22); and

using the distributed application to program a hearing aid in the hearing aid system (adjust parameters, col. 15, lines 7-12, 19-26). See additionally, col. 14 line 1-col. 15 line 37.

Hagen does not clearly teaches the receiving is through at least one long-range network using the at least one mobile wireless communication protocol.

However, Hagen as modified by Knappe teaches wireless communications, implemented on a mobile wireless communication protocol, between the mobile device and the programming fitting server. See discussion of claim 1. Knappe teaches long-range network (22). When the teachings are combined, receiving, which is a form of communication, would have been performed through a long-range network using mobile wireless communication protocol. Note discussion of claim 1 for a motivation to combine.

Art Unit: 2615

Consider claim 66, note discussion of claims 1 and 4 for hearing aid system having a hearing aid (344, 348), programming fitting server (236) adapted to store (col. 10, lines 11-22), distributed application (hearing aid programming software), and terminal (320) adapted to program the hearing aid (344,348), the terminal adapted to communicate using a wire communication protocol to receive the distributed application from the server (discussion of claim 4, with respect to receiving).

Hagen as modified further teaches the terminal / mobile device (320) is adapted to use the distributed application to interact with the hearing aid (adjust parameters, col. 15, lines 7-12, 19-26). Note discussion of claim 1 for a motivation to combine.

It is noted that "the mobile device" of line 6 is interpreted as "the terminal", as best understood and as it appears to be.

Consider claims 68 and 69, Knappe teaches that the terminal is adapted to communicate using a wireless access protocol (such as cellular telephone and see col.5 lines 7-17); and the system of the distributed application includes an object (such as for matching telephone number) that is adapted to receive information from the server and adapted to transmit information to the server (see col.2 line 19-col.3 line 33).

4. Claims 15-21, 24-26, 30,32-33, 36, 47- 53,56-58, 64-65 and 94 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hagen et al. (US PAT 6,424,722) in view of Anderson (US PAT 5,721,783).

Consider claim 15, Hagen teaches that a hearing aid system having hearing aid (344,348), programming fitting server (236), mobile device (320) adapted to

Art Unit: 2615

communicate with the programming fitting server and to program the software in the hearing aid, as discussed in detail in the rejection of claim 1 and 4 with respect to Hagen.

Hagen does not teach that the communication between the mobile device and the programming fitting server uses a mobile wireless communication protocol.

Anderson teaches a mobile device (RPU 16 with wireless link circuitry 19) receives programming (test program) using a mobile wireless communication protocol (secondary wireless link), alternative to wired link. Col. 27, lines 22-24. See additionally, fig.2, col.5 line 60-col. 6 line 46, col.25 line 15-col. 26 line 53.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Anderson into Hagen to include wireless communications, implemented on a mobile wireless communication protocol, between the mobile device and the programming fitting server, in addition to the wired communications. This would have allowed improved freedom of movement (col. 3, lines 1-5).

Consider claim 16, Hagen teaches that the server (see fig.9, 236 such as center computer and see col.2, line 22-42) is adapted to transmit a distributed application to the mobile device (320) the distributed application being adapted to interact with the hearing aid (344,348 and see col. 14 line 1-col. 15 line 33).

Consider claims 17 and 48-49, Anderson teaches (because by local area networking) a server adapted to communicate with the mobile device (see fig.1, 13 in associated with 16 to provide a mobile device and col.27 lines 4-24)(see col.26 lines 6-

Art Unit: 2615

53); and the system of further comprising at least one network to facilitate communications at least among the hearing aid system, the mobile device (see fig.1, 13 in associate with 16 to provide a mobile device and col.27 lines 4-24), and the server (see col.26 lines 6-53 and see the discussion in claim 15).

Consider claims 18-19 and 50-51, Hagen teaches that the system of the hearing aid system (see fig.9) includes a hearing aid programming system (see fig.9 and col.14 line 1-col.15 line 33); and the system of the hearing aid system (see fig.9) is capable of audio signal processing system (see figs.9-10 and col.14 line 1-col.15 line 33).

Consider claims 20 and 52, Bagen teaches that the system of the hearing aid system (see fig.9) includes a programming module adapted to communicate with the hearing aid, and wherein the programming module is adapted to communicate with the mobile device (320) so as to receive at least one programming instruction from the mobile device (320) to program the hearing aid (see fig.9, 344, 348 and col.14 line 1-col.15 line 33).

Consider claim 21, Anderson teaches the system of the programming module includes a headset (see fig.2, 28).

Consider claim 24, Anderson teaches that the system of the mobile device includes a mobile device selected from a group consisting of a digital cellular telephone, a personal digital assistant, and a personal communication and information device (see fig.2).

Consider claims 25-26 and 57-58 Hagen teaches that the system of the mobile device (see fig.9, 320) is adapted to inherently synchronize data with the server (see

Art Unit: 2615

fig.9, 236 such as center computer and see col.2, line 22-42 and col. 14 line 1-col. 15 line 33); and the mobile device (see fig.9 320) receive an upgraded audiological software from the server (see fig.9, 236 such as, center computer and see col.2, line 22-42 and col. 14 line 1-col. 15 line 33).

Consider claim 30, Anderson teaches the system of the mobile device is configured to communicate with the hearing system over a short-range network (see fig.2 and col.5 line 61-col.6 line 25).

Consider claims 32-33, and 64-65, Anderson teaches that the system of the optical (infrared) communication network (see fig.1) includes an optical communication network using Infrared Data Association (IrDA) protocol (see col.22 line 63-col.23 line 35); and the system of the hearing aid system is adapted to communicate with the mobile device wirelessly through the short-range network (see fig.2 (between 23 and 22)).

Consider claim 36, Hagen as modified by Anderson teaches a system comprising:
a hearing aid system having a hearing aid (344,348, discussion of claim 1);
a distributed application (hearing aid programming software, discussion of claim 4);
a mobile device adapted (320) to program the hearing aid, the mobile device adapted to receive the distributed application from a computer (236) (discussion of claim 4, receiving); the mobile device (320) adapted to use the distributed application to program the hearing aid (discussion of claim 15, to program).

Hagen does not teach the reception uses mobile wireless communication protocol and through long-range network.

Art Unit: 2615

Anderson teaches a mobile device (RPU 16 with wireless link circuitry 19) receives programming information using a mobile wireless communication protocol (secondary wireless link), alternative to wired link, as discussed in detail in the rejection of claim 15. Anderson also teaches a long-range network (see col. 25 line 15-col. 26 line 53).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Anderson into Hagen to include a wireless communication for the reception through a long-range network. Note discussion of claim 15 for a motivation to combine.

Consider claims 47-48, Hagen as modified by Anderson teaches hearing aid system having a hearing aid (344,348); and terminal (320) adapted to program software in the hearing aid (discussion of claim 15, to program), the terminal adapted to use at least one wire communication protocol to communicate with a programming fitting server (236) (discussion of claim 15, to communicate). It is noted that software (program 1, ..., program N) in the hearing aid in Hagen is transmitted from PMU 320 and programmed/controlled by the PMU (col. 14, line 55-62; col. 15, lines 1-18).

Consider claim 53, Anderson teaches that the system of the programming module includes a headset (see fig.2) that is capable of communicating ambient information (see col. 26 line 6-col.27 line 24).

Consider claim 56, Anderson teaches the system of the terminal is a data terminal (see figs.2 and 5a-5b and col.11 line 19-col.12 line 46)

Art Unit: 2615

Consider claim 94, Anderson teaches the system of the mobile device is adapted to communicate using a Wireless Access Protocol (such as cellular telephone and see col.5 line 22-col.6 line 25).

5. Claim 22-23 and 54-55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hagen et al. (US PAT 6,424,722) as modified by Anderson (US PAT 5,721,783) as claims 15 and 47 above, and further in view of Shennib (US PAT 5,197,332).

Consider claims 22, 54, Hagen and Anderson do not teach the hearing aid is capable of digital audio compression and decompression, and wherein the programming module is capable of digital audio compression and decompression.

However, Shennib teaches the hearing aid is capable of digital audio compression and decompression, and wherein the programming module is capable of digital audio compression and decompression (see col.6 line 62-col.8 line 25).

Therefore, it would have obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Shennib into the teaching of Hagen and Anderson to provide a unitary system for both testing of hearing and programming a programmable hearing aid. The system incorporates all of the necessary electronics and transducer components into a headset instrument to be worn by a patient.

Consider claims 23, 55, Shennib teaches the system of the programming module is capable of sending a test audio signal to the hearing aid so as to test at least one aural response of a patient (see col.7 line 22-col.8 line 29).

6. Claims 27-29, 31-32 and 34-35 and 59-63 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hagen et al. (US PAT 6,424,722) as modified by Anderson (US PAT 5,721,783) as claims 15 and 47 above, and further in view of Leppisaari et al. (US PAT 6,717,925).

Consider claims 27 and 59, Hagen and Anderson do not teach that the system of the mobile device is adapted to use a data service protocol selected from a group consisting of General Packet Radio Service (GPRS), High-Speed Circuit-Switched Data Service (HSCSD), Enhanced Data Rate for GSM Evolution (EDGE), Integrated Services Digital Network (ISDN), Universal Mobile Telecommunications System (UMTS), and Cellular Digital Packet Data (CDPD).

However, Leppisaari teaches that the system of the mobile device is adapted to use a data service protocol selected from a group consisting of General Packet Radio Service (GPRS), High-Speed Circuit-Switched Data Service (HSCSD), Enhanced Data Rate for GSM Evolution (EDGE), Integrated Services Digital Network (ISDN), Universal Mobile Telecommunications System (UMTS), and Cellular Digital Packet Data (CDPD) (see col.5 lines 24-63).

Therefore, it would have obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Leppisaari into the teaching of Hagen and Anderson to provide a method of operating a mobile communication system supporting radio data transmission between a mobile station and a network in a number of different packet data protocols including a point to multipoint-multicast protocol,

Art Unit: 2615

where the protocol is identified by a protocol identifier transmitted between the network and the mobile station.

Consider claims 28-29, 31 and 60-63, Leppisaari teaches that the standard mobile wireless communication protocol includes a wireless communication protocol to operate on a long-range wireless network (see fig.2, (between MS and BSS); and the system of the wireless communication protocol to operate on a long-range wireless network (see fig.2, (between MS and BSS) includes a protocol selected from a group consisting of Global System for Mobile Communications (GSM), Code Division Multiple Access-One (cdmaOne), Time Division Multiple Access (TDMA), PDC, JDC, Universal Mobile Telecommunications System (UMTS), Code Division Multiple Access-2000 (cdma2000), and Digital Enhanced Cordless Telephony (DECT) (see col.5 lines 24-63); and the system of the at least one network includes a short range network (see fig.2 (between MS and PC/PDA)); and the system of the short-range (see fig.2 (between MS and PC/PDA)) network includes a short range network selected from a group consisting of a radio communication network, an optical communication network, and a wired communication network (see col.5 lines 24-63).

Consider claim 32, Anderson teaches that the system of the optical (infrared) communication network (see fig.1) includes an optical communication network using Infrared Data Association (IrDA) protocol (see col.22 line 63-col.23 line 35).

Consider claims 34, Leppisaari teaches the system of further comprising an the server is adapted to couple to an Internet (see fig.2).

Art Unit: 2615

Consider claim 35, Hagen teaches that the system, further comprising a gateway inherently (because such as a computer includes with a network card or router switch) adapted to coupled in a communication path between the mobile device (see fig.9, 320) and the server (236 such as center computer and see col.2, line 22-42 and see col. 14 line 1-col. 15 line 33).

7. Claims 37-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hagen et al. (US PAT 6,424,722) as modified by Anderson (US PAT 5,721,783) as claim 36 above, and further in view of Szymansky (US PAT 6,557,029).

Consider claim 37, Hagen and Anderson teaches a hearing system, but Brennan and Anderson fail to teach the system of the distributed application includes an applet

However, Browning teaches the system of the distributed application includes an applet (see col.4 lines 1-39).

Therefore, it would have obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Szymansky into the teaching of Hagen and Anderson to provide several different software processes simultaneously.

Consider claims 38-40, Szymansky teaches the system of the applet is configured as a java applet (see col.4 line 1-39); and the system of the applet is adapted to receive information from the computer, and wherein the applet is adapted to transmit information to the computer (see figs. 1-2 and col.4 lines 1-39); and the system of the mobile device includes a browser that is adapted to receive the applet to execute on the mobile device so as to interact with the system (see figs. 1-2 and col.4 lines 1-39).

8. Claims 41 and 71 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hagen et al. (US PAT 6,424,722) as modified by Anderson (US PAT 5,721,783) as claims 15-16 and 47-48 above, and further in view of Knappe (US PAT 6,6061,431).

Consider claims 41 and 71, Hagen and Anderson do not clearly teach that the system of the server includes a database that includes patient data, and audiological data associated with at least one hearing aid system.

However, Knappe teaches that the system of the server includes a database that includes patient data, and audiological data associated with at least one hearing aid system (see col.2 line 19-col.3 line10).

Therefore, it would have obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Knappe into the teaching of Hagen and Anderson to provide hearing compensation parameters stored in a searchable attribute database associated with a user's telephone number.

Consider claims 69-71, Knappe teaches that the system of the at least one object (such as for matching telephone number) is adapted to receive information from the server, and wherein the at least one object is adapted to transmit information to the server (see col.2 line 19-col.2 line 33); and the system of the terminal includes a software environment that is adapted to receive the at least one object (such as for matching telephone number) to execute on the terminal so as to interact with the hearing aid system (see col.1 line 36-col.2 line 5); and the system of the server includes

Art Unit: 2615

a database that includes patient data (user's profile), and audiological data associated with at least one hearing aid system (see col.2 line 12-col.3 line 35).

9. Claim 43-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hagen et al. (US PAT 6,424,722) as modified by Anderson (US PAT 5,721,783) as claim 15 and 24 above, and further in view of Fazio (US PAT 6,590,986).

Consider claim 43, Hagen and Anderson do not teaches the system of the personal communication and information device includes a CompactFlash module that is adapted to communicate with the hearing aid system.

However, Fazio teaches that the system of the personal communication and information device includes a CompactFlash module that is adapted to communicate with the hearing aid system (see abstract and fig.2).

Therefore, it would have obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Fazio into the teaching of Hagen and Anderson to provide a hearing aid programming interface that be lawfully used with computers of all types.

Consider claim 44, Anderson teaches the system of the digital cellular phone includes a custom interface module that is adapted to communicate with the hearing aid system (see col.26 line 6-col.27line 24).

Consider claims 45-46, Fazio teaches the system of the upgraded audiological software includes a piece of software to be executed on the mobile device (see figs. 1-2 and col.3 line 19-col.4 line30); and the system of the hearing aid system includes a

Art Unit: 2615

hearing aid, and wherein the upgraded audiological software includes a piece of software to be executed on the hearing aid (see figs. 1-2 and col.3 line 19-col.4 line 30).

10. Claims 42 and 72 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hagen et al. (US PAT 6,424,722) and Anderson (US PAT 5,721,783) as modified by Leppisaari et al. (US PAT 6,717,925) as applied to claims 15 and 31 above, and further in view of Peters (US PAT 6,601,093).

Consider claims 42 and 72, Hagen, Anderson and Leppisaari do not teach that the system of the radio communication network includes a network selected from a group consisting of HomeRF, DECT, PHS, WLA, and Bluetooth technology.

However, Peters teaches that the system of the radio communication network includes a network selected from a group consisting of HomeRF, DECT, PHS, WLA, and Bluetooth technology (see col.2 line 59-col.3 line 11).

Therefore, it would have obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Peters in to teaching of Hagen; Anderson and Lappisaari to provide provide a communication system which is a low-powered radio module.

11. Claims 67 and 70 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hagen (US PAT.6,424,722) as modified by Knappe (US PAT 6,6061,431) as applied to claim 66 above, and further in view of Peter (US PAT 6,601,093).

Consider claims 67 and 70, Hagen teaches that the system of the terminal is configured to communicate with the hearing aid system using wireless and the terminal (such as computer) is configured to communicate with the hearing aid system over wireless or wire (see fig.1 and col.14 line 1-col.15 line 37), but Brennan and Knappe do not clearly teach that Bluetooth wireless communication protocol; and a short-range network using a protocol associated with the short-range network.

However, Peters teaches the Bluetooth wireless communication protocol and a short-range network using a protocol associated with the short-range network (see fig.1 and col.5 line 1-col.6 line 67).

Therefore, it would have obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Peters in to teaching of Hagen; and Knappe to provide a communication system which is a low-powered radio module for saving energy.

12. Claims 93 and 95 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hagen et al. (US PAT 6,424,722) as modified by Anderson (US PAT 5,721,783) as claim 36 above, and further in view of Peters (US PAT 6,601,093).

Consider claims 93 and 95, Anderson teach that the system of the mobile device is configured to communicate with the hearing aid system using wireless communication protocol and the system of the mobile device is configured to communicate with the hearing aid system over the short-range network (see fig.2, col.4 line26-col.5 line 60); but Brennan and Anderson does not clearly teach that the Bluetooth wireless

Art Unit: 2615

communication protocol and a short-range network using a protocol associated with the short-range network.

However, Peters teaches the Bluetooth wireless communication protocol and a short-range network using a protocol associated with the short-range network (see fig.1 and col.5 line 1-col.6 line 67).

Therefore, it would have obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Peters in to teaching of Hagen; and Anderson to provide a communication system which is a low-powered radio module.

Response to Arguments

13. Applicant's arguments filed 03-03-2006 have been fully considered but they are not persuasive.

Applicant argued that the last office action states that Hagen teaches that a mobile wireless communication protocol (see fig. 9, 236, 320) to communicate between a mobile device (320) and a programming hearing aid (see col. 9 line 1 -col. 15 line 37) and then went to state Hagen does not clearly teaches that a mobile wireless communication protocol to communicate between a mobile device and a programming fitting server (see remark page 18 last paragraph). The examiner agrees that was a typo-mistake and deletes that first statement in this office action. The ground of rejection maintains the same.

Regarding applicant's arguments of claims 1, 4 and 66, Hagen is relied on to teach mobile device (portable multiprogram unit PMU 320, col. 12, line 66 – col. 13, line 9),

Art Unit: 2615

programming fitting server (host computer 236, to perform programming function, col. 10, lines 11-22); and programming (programming functions) software (program memory 374) in a hearing aid (344) using (download and control) the programming fitting device (236) and the mobile device (320). Knappe is relied on to teach communication between a mobile device (cellular telephone version of telephone 16, col. 5, lines 6-17) and a programming fitting server (server hosting database 24, col. 2 line 60 – col. 3, line 20) using a mobile wireless communication protocol (forward compensated audio signal to cellular telephone). The combined teaching of Hagen and Knappe would provide wireless communications, implemented on a mobile wireless communication protocol, between the mobile device and the programming fitting server, in addition to the wired communications. Hagen teaches distributed application (hearing aid programming software) in that it interacts with the host, the PMU and the hearing aid, and that it is transmitted from the server/host to the PMU and to the hearing aid and executed to control the operation of the hearing aid.

Regarding applicant's arguments of claims 15, 36 and 47, Hagen is relied on to teach mobile device (portable multiprogram unit PMU 320, col. 12, line 66 – col. 13, line 9), programming fitting server (host computer 236, to perform programming function, col. 10, lines 11-22); and programming (programming functions) software (program memory 374) in a hearing aid (344) using (download and control) the programming fitting device (236) and the mobile device (320). Alternative to Knappe, Anderson also teaches a mobile device (RPU 16 with wireless link circuitry 19) receiving programming (test program) via a mobile wireless communication protocol (secondary wireless link),

Art Unit: 2615

alternative to a wired link. The combined teaching of Hagen and Anderson would provide wireless communications, implemented on a mobile wireless communication protocol, between the mobile device and the programming fitting server, in addition to the wired communications.

In response to applicant's argument regarding motivations to combine, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Hagen, Knappe and Anderson are directed to programming for hearing compensation and motivations to combine are provided in the rejection based on prior art relied on.

For these reasons, applicant's arguments are not persuasive.

Conclusion

14. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

Art Unit: 2615

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

15. The prior art made of record and not relied upon is considered pertinent to Applicant's disclosure. Kalra (US PAT 6,490,627); and Krueger (US PAT. 6,308,222) are recited to show other related hearing aid system.

16. Any response to this action should be mailed to:

Mail Stop ____ (explanation, e.g., Amendment or After-final, etc.)

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Facsimile responses should be faxed to:
(703) 872-9306

Hand-delivered responses should be brought to:
Customer Service Window
Randolph Building
401 Dulany Street
Alexandria, VA 22314

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lao,Lun-See whose telephone number is (571) 272-7501. The examiner can normally be reached on Monday-Friday from 8:00 to 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chin Vivian, can be reached on (571) 272-7848.

Art Unit: 2615

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 whose telephone number is (571) 272-2600.

Lao, Lun-See L.S.
Patent Examiner
US Patent and Trademark Office
Knox
571-272-7501
date 05-29-2006



VIVIAN CHIN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600

5/30/06